MEMORANDUM

FROM: Lisa Hanle, U.S. EPA, Climate Change Division

TO: Docket EPA-HQ-OAR-2011-0147, 2011 Technical Corrections, Clarifying and Other

Amendments to Certain Provisions of the Mandatory Greenhouse Gas Reporting Rule.

DATE: May 12, 2011

SUBJECT: Summary of questions raised on various subparts of the final Mandatory

Reporting of Greenhouse Gases Rule (40 CFR Part 98) after promulgation that are

addressed in the proposed 2011 Technical Corrections, Clarifying and Other

Amendments to Certain Provisions of the Mandatory Reporting of Greenhouse Gases

Rule.

1.0 INTRODUCTION

The 2009 final GHG reporting rule (2009 final rule) was signed by EPA Administrator Lisa Jackson on September 22, 2009 and published in the <u>Federal Register</u> on October 30, 2009 (74 FR 56260, October 30, 2009). The 2009 final rule, which became effective on December 29, 2009, included reporting of GHGs from various facilities and suppliers, consistent with the 2008 Consolidated Appropriations Act. Subsequent notices were published in 2010 finalizing the requirements for subparts FF, II, and TT (75 FR 39736, July 12, 2010), subpart W (75 FR 74458, November 20, 2010), subpart DD (75 FR 74774, December 1, 2010), and subpart RR (75 FR 75060, December 1, 2010). Subpart OO, which was promulgated as part of the 2009 final rule was also revised in 2010 (75 FR 79092, December 17, 2010). These requirements are contained in 40 CFR part 98. The rule does not require control of GHGs, rather it only requires that sources above certain threshold levels monitor and report emissions and other related data.

Since promulgation of the rule, the Administrator has identified a number of technical issues that need to be corrected and specific portions of the Mandatory Greenhouse Gases Reporting Rule (hereafter referred to as "Part 98") that need to be clarified. EPA is proposing to amend specific provisions in Part 98 to correct those technical and editorial errors that have been identified since promulgation and to propose clarifying or other amendments to certain provisions that have been the subject of questions from reporting entities.

The purpose of this memorandum is to describe the extent of EPA's outreach efforts for Part 98 and to summarize the questions that have been raised during EPA's outreach activities that are being addressed by some of the proposed amendments.

2.0 SUMMARY OF EPA OUTREACH ACTIVITIES

EPA has conducted an extensive outreach program for the Mandatory GHG Reporting Rule, including meetings with trade associations and individual businesses, on-line web-based seminars (webinars), and training sessions for EPA Regional Offices. The following table lists those meetings

and webinars that EPA has conducted to date, along with the month and year of the activity. When available, the table also includes the approximate attendance for the meeting or webinar.

POST-SIGNATURE MEETINGS AND WEBINARS

Month and Voor of Information Marting on Waling
Month and Year of Information Meeting or Webinar Organization or Location (estimated attendance, if available)
Sept 2009
EPA Regional Offices Briefing (100)
Agriculture community teleconference (100)
State and Local Agencies teleconference (100)
Clean Energy Group Meeting (about 40) State of Washington (2)
Business Council (73)
Call with Massachusetts on data system (2)
Overview webinar (293)
US Climate Action Partnership (20)
Overview webinar (284)
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National Cooperative Refinery Association, and Van Arsdall & Associates Oct 2009
Oil and Gas Compact (30)
Detailed webinar (326)
Portland Cement Assoc. (20)
CENSARA(50)
Overview webinar (217)
Applicability Tool Demonstration (84)
National Lime Assoc. (3)
Detailed webinar (252)
EEI (80)
NACAA (75)
Nitric Acid and Ammonia Assoc.(30)
TFI, AISI, SMA
Overview webinar (176)
Detailed webinar (208)
Air Program Managers and staff (25)
Detailed webinar (206)
Aluminum Industry
Steel Manufacturers Assoc.
Natural Gas Star Overview webinar (133)
Carolina Air Pollution Control Assoc. (400)
Applicability Tool Demonstration (238) Waste Management and Equipment Companies (25)
Ohio Manure Storage
Overview webinar (251)
Corporate Climate Regulation, Chicago, IL Midwest Transportation & Air Owelity Conference
Midwest Transportation & Air Quality Conference
Detailed webinar (333)

POST-SIGNATURE MEETINGS AND WEBINARS

Month and Year of Information Meeting or Webinar
Organization or Location (estimated attendance, if available)
TCR/CAA (90)
Environmental Groups (10)
API
NOV 2009
Misc. Meetings with Industries (Refineries, Pulp and Paper, Cement) (100)
Northeast Gas Assoc.
Ecology and Environment, Inc. (2)
Detailed webinar (253)
TCR
Tribal Air Coordinators (50)
GHG data exchange discussion with New Mexico (8)
API (20)
ABA (100)
Training for three regional cap and trade programs – DC (70)
State-EPA Dialogue - DC (80)
Treated Wood Council (60)
Detailed webinar (172)
MAPI (Manufacturing Alliance) (15)
Environmental Services Corporation (150)
Western Climate Initiative partner meeting – Santa Fe (50)
Detailed webinar (171)
Regional Climate sub-leads (40)
Air Products (5)
Waste Management and others (10)
Detailed webinar (96)
DEC 2009
AWMA-EPA- RTP (100)
Envirosys (4)
Detailed webinar (50)
ACC (5)
National Grid
Detailed webinar (91)
Utilitpoint and Allegro (115)
CARB
NPRA and API
Golder and Associates
Anadarko (10)
Kinder Morgan
EEI
SWANA- LFGTE
Thermo Fisher Scientific
EPA Region 4 Training (100)
Waste Management and others (8)
Air Products (5)

POST-SIGNATURE MEETINGS AND WEBINARS

Month and Year of Information Meeting or Webinar Organization or Location (estimated attendance, if available) The Fertilizer Institute ADM (8) **JAN 2010** Detailed webinar (83) Air Products National Emissions Inventory (30) OECA- Regional offices (30) National Grid Alliance of Automobile Manufacturers (9) Detailed webinar (100) NRPA (300) Feb 2010 Dedicated webinar for American Colleges and Universities (220) EPA Regional Inventory, Enforcement (23) University Challenge State webinar (200) Webinar (182) Iowa Landfill operators (125), Asphalt Paving Association of Iowa (70), and the Iowa Chapter of AMWA (60). **Mar 2010** Inst. Of Clean Air Companies (23) SWANA (200) **EPA AFS Compliance Meeting** Second Nature (Colleges/Universities) Panel (20) ECOS (50) **PCA** Training- EPA Regions 5 and 7 (180) Iowa Landfills (50) April 2010 Arkansas Environmental Federation, Little Rock (160) NACAA Emissions and Modeling Committee (30) Webinar (75) Central TX AWMA (50) Chicago Exchange Meeting Exchange Network National Meeting (50) EPA Air Division Directors (20) National Assoc. of Clean Water Agencies Pepsico-Frito Lay (150) Pacific NW Legislative Energy Horizon Inst./AGA (35) May 2010 LA, Boise, Portland Training (150, 100, 70, respectively) ESC Users Group (150) **NCASI** EPRI CEMUG (150) **June 2010**

Webinar: Q&A Session (54)

POST-SIGNATURE MEETINGS AND WEBINARS

Month and Year of Information Meeting or Webinar Organization or Location (estimated attendance, if available) October 2010 e-GGRT Training (748) e-GGRT Training (566) November 2010 e-GGRT Training (521) Webinar: Subpart FF (44) General Stakeholder Call: Subparts RR and UU (88) December 2010 EPA Regional Offices Briefing (20) NACAA (50) Webinar: Subpart I (71) Webinar: Subpart W (481) Webinar: Subparts RR and UU (77) Webinar: e-GGRT and OTAOREG Training (386) Webinar: Subpart W (130) January 2011 Webinar: Subpart W (138) Webinar: e-GGRT Training (512) February 2011 Webinar: Overview (98) EEI: Subpart RR May 2011 Webinar: Overview Webinar: Subpart OO **June 2011** Webinar: Overview

3.0 SUMMARY OF QUESTIONS FROM THE EPA HELPLINE AND TRADE ASSOCIATIONS BEING ADDRESSED BY PROPOSED AMENDMENTS

EPA has maintained a web-based helpline that allows individuals to submit questions about Part 98, including the additional subparts and rule amendments promulgated in 2010. So far, EPA has resolved approximately 2,300 inquiries on Part 98. Most of those inquiries have been resolved by providing further guidance to reporting entities through a web-based list of answers to frequently asked questions. However, several additional questions would be resolved through the 2011 proposed amendments to Part 98.

The EPA has also held meetings with several trade associations for industries affected by Part 98, and many questions were presented by those trade associations that would be resolved through the 2011 proposed amendments to Part 98.

The following table summarizes the questions that have been raised from the EPA helpline and trade associations on various subparts of Part 98 which are being addressed by the proposed 2011 technical corrections, clarifying and other amendments. Not all of the technical corrections and other

amendments correspond directly to questions that were raised by reporters. The need for some corrections and other amendments were identified as a result of internal EPA review stemming from reporter questions and may not be reflected in the following table. Any specific identifying information from the incoming questions has been removed from the table below.

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	Subpart A – General Provisions		
regarding which communications can be submitted through the electronic greenhouse gas reporting tool and what communications can be submitted through the mail to the Director of the Climate Change Division. required under Part 98 as companies are sending reports The State will hold any reports received until they have and the submitted contact on our Point of Contact The State will hold any reports received until they have and the submitted through the mail to the Director of the Climate Change Division. To where and how is the Certificate of Representation so that it is to be submitted electronically. 98.9 only gives a Under §98.5 of the GHG Rule it says that the Certificate to be submitted electronically. Where and how is this to GHG Report is also to be submitted electronically, will follow the submitted through the mail to the Director of the Climate Change Division.	We have received an inquiry from a state regarding where to send reports required under Part 98 as companies are sending reports to our state agency. The State will hold any reports received until they have further instructions. There is not a designated contact on our Point of Contact list for the region.	At least 4 individuals	Helpline
	To where and how is the Certificate of Representation sent? At 98.5 it says that it is to be submitted electronically. 98.9 only gives a mailing address.		Helpline
	Under §98.5 of the GHG Rule it says that the Certificate of Representation is to be submitted electronically. Where and how is this to be done? The Final GHG Report is also to be submitted electronically, will facilities be notified of the procedures to follow for submission of the required information?		Helpline
	What is the development status of EPA's electronic submission tool for the Part 98 greenhouse gas mandatory reporting rule (GHG MRR) [98.5]? When does EPA expect to have a version of reporting tool available for industry review? Will the tool include functionality to submit the "certification of representation" as described in 98.4(i)? Will the tool include functionality to submit the "notice of delegation" as described in 98.4(m)? Will the tool allow importing of data from spreadsheet templates or will it only accept data via manual population of web forms?		Helpline
	An EPA regional representative received the attached report from a facility in the region for the GHG Reporting Rule. They must have not reviewed 98.9. Please let me know if this e-mail box is the correct location to send this to.		Helpline
	Which address should be used to submit a letter of notification of cessation of operations in accordance with 40 CFR 98.2(i)(3)?		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Amend the definition of "blowdown vent stack emissions" in 98.6 to add the phrase "emissions from emergency events are not included"	The blowdown vent stack source category is defined in 98.6 as venting due to "maintenance and/or blowdown operations including compressor blowdown and emergency shut-down (ESD) system testing", all of which can be considered related to the process. Please confirm that venting due to actual emergency shutdowns [not due to ESD system testing] is not included in the blowdown vent stack source category.	At least 1 individual	Helpline
Amend the definition of "supplier" in 98.6 to refer to those source categories listed in Table A-5 to subpart A of part 98.	The applicability of 40 CFR 98 is unclear. It appears as though a facility in the chemical industry, for example, might import to and export from their U.S. facilities products not included in the definition of supplier. The products are not intended for combustion. For example, a facility could produce plastic resins that are classified under NAIC code 325211. It may import materials that could be classified in the "Miscellaneous Products" category of the "Petrochemicals Feedstocks" grouping in Table MM-1. However, the sole purpose of importing these materials to their facility is to use them as raw materials in the production of plastic polymers. In the course of producing plastic polymers, a by-product may be created that can be used as raw material for manufacturing a product outside the U.S. It appears that the definition of supplier is key for this facility. The definition of supplier in §98.6 is "Supplier means a producer, importer, or exporter of a fossil fuel or an industrial greenhouse gas." Materials these members import are intended for use as raw materials in other petrochemical based processes, not for combustion, and therefore these materials do not meet the definition of "Fossil Fuels", which is: "Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material, including for example, consumer products that are derived from such materials and are combusted." Emphasis added. Thus, we believe	At least 2 individuals	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	that such a facility does not meet the definition of supplier. Subpart A at §98.2(a) establishes who must report; "The GHG reporting requirementsapply toany supplier that meets the requirements of paragraph (a)(4)." Because this facility is not a supplier, as defined in the rule, we believe that it does not have to evaluate the requirements of paragraph (a)(4). It is the provisions of that paragraph §98.2(a)(4) that bring you to Subpart MM. Thus, Subpart MM does not apply.		
Amend the definition of "supplier" in 98.6 to refer to those source categories listed in Table A-5 to subpart A of part 98.	The GHG Reporting Rule applies to facility owners and operators, and suppliers. 40 CFR 98.2. The term "supplier" is defined at 40 CFR 98.6 as, among other things, an importer or exporter of "fossil fuel." EPA discussed the definitions of supplier and fossil fuel in an August 11, 2010 rule amendment proposal, and proposed to amend the definition of fossil fuel in Section 98.6 to clarify that it applies to substances derived from natural gas, petroleum or coal "for the purpose of creating useful heat." EPA adopted this change in a final rule amendment, an advance publication copy of which EPA has posted to its website. EPA's discussion in the proposed rule amendment indicated that the change to the fossil fuel definition would ensure that fossil fuel is defined clearly to refer to materials produced for the purpose of creating useful heat. 75 Fed. Reg. 48744, 48754 (August 11, 2010). When EPA issued the final rule change, it also indicated in the preamble that it did not intend to have any impact on the coverage of greenhouse gases under the GHG reporting program. Prepublication Copy, p. 69. Given that (i) EPA has stated that the term "fossil fuel" is intended to be construed as natural gas, petroleum, coal, or substances derived from	At least 2 individuals	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	states that Part 98 is applicable to owners and operators of certain facilities and to suppliers, (iii) the term "supplier" is defined as a producer, importer, or exporter of a fossil fuel or an industrial greenhouse gas, and (iv) EPA seems to indicate that its definitional change is not intended to alter the original meaning of the rule, is it accurate to conclude that the reporting rule sections applicable to suppliers are intended to apply only to those who produce, import or export natural gas, petroleum, coal, or substances derived from these products, for the purpose of creating useful heat? Stated another way, would a company that imports or exports chemicals for use in a manufacturing process (e.g., to manufacture another chemical) and not for use as a heat or energy source not be considered to be a "supplier" and therefore not be subject to Subpart MM?		
Amend 40 CFR 98.2(d) and (e) to clarify that that the applicability determination for importers should be assessed separately from the applicability	I have two questions regarding import/export that I am sure have been answered many times. I have multiple manufacturing facilities under the same corporate owner. Each facility may import or export HFC containing equipment and closed cell foam 3. If only the exporting threshold is exceeded are we still required to report imports or do you only report for the activity for which the threshold is exceeded?	At least 4 individuals	Helpline
determination for exporters	In the reporting applicability thresholds in 40 CFR 98.2(a)(4)(ii) for Subpart MM, are the reporting categories for refineries, importers greater than 25,000 tonnes CO ₂ e/yr, and exporters greater than 25,000 tonnes CO ₂ e/yr independent of each other? If only the exporting threshold is exceeded are we still required to report imports or do you only report for the activity for which the threshold is		Helpline Helpline
	exceeded? If a facility triggers the 25,000 threshold for exports, do they also need to report imports even though imports have not exceeded the 25,000 threshold?		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Clarifying Table A-5 to	Does 40 CFR 98, Subpart MM, apply to petroleum products being	At least 1	Helpline
state that coverage and	imported/exported to/from chemical plants? ExxonMobil has several chemical	individual	
the applicability	plants that import/export Petrochemical Feedstocks and/or Natural Gas		
determination for	Liquids (as listed in Table MM-1) to support our chemical manufacturing		
importers and exporters	processes. However, chemical plants do not meet the definition of "Supplier",		
under subpart MM	as found in §98.6:		
includes suppliers of	Constitution of the contract o		
natural gas liquids.	Supplier means a producer, importer, or exporter of a fossil fuel or an		
Also related to amending	industrial greenhouse gas. Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material, including		
the definition of	for example, consumer products that are derived from such materials and are		
"supplier" in 98.6 to refer	combusted. Industrial greenhouse gases means nitrous oxide or any		
to those source categories	fluorinated greenhouse gas.		
listed in Table A-5 to	nuormated greenhouse gas.		
subpart A of part 98.	The petrochemical feedstocks and/or natural gas liquids being		
The property of	imported/exported by ExxonMobil chemical plants are not "Fossil fuels" (as		
	defined above) because they are not used for combustion, nor are they		
	Industrial greenhouse gases. Therefore, it appears that chemical plants do not		
	meet the definition of Supplier and, consequently, Subpart MM should not		
	apply to these entities. Please clarify EPA's intent regarding applicability of		
	Subpart MM to chemical plants.		
Amend the definition of	Section 98.3(c)(11) requires reporting of information on the U.S. parent	At least 1	Helpline
"United States parent	company of the "reporting entity." Part 98 does not define "reporting entity."	individual	
company(s)" in 40 CFR	Section § 98.3 states that the reporting requirements apply to the "owners and		
98.6 to replace the term	operators of any facility" that meets the applicability provisions of that		
"reporting entity" with	section. Similarly, Subparts C and D state that "you" must report and § 98.2		
the term "facility or	defines "you" as "an owner or operator" subject to Part 98. However, in the		
supplier."	proposed and final rules on parent company reporting, EPA describes the rule		
	as requiring reporting by "facilities" and "suppliers" and refers to the		
	"reporting entity" as the "facility or supplier," and not as the "owner and		

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	operator" of the facility or supplier. See, e.g., 75 Fed. Reg. at 18457; 75 Fed. Reg. at 57676. As a result, it appears that EPA intends the reporting of parent company information under § 98.3(c)(11) to be limited to the owner of the facility. Please confirm that the rule does not require, and the reporting format (which has not been released) will not require, reporting of parent company information on the "operator" of a facility where the operator is not also the owner. If EPA intends reporting of parent company information on both, please explain where that is reflected in the proposed and final parent company rule and how EPA will ensure that reporting will not result in double-counting of reported GHGs at the parent company level.		
Clarify threshold for electrical transmission and distribution equipment use in Table A-3.	Our site contains electrical transmission and distribution equipment that distributes power throughout the site. Within in this equipment are several sealed circuit breakers, containing a total of 1,740 pounds of SF6.	At least 2 individuals	Helpline
	Originally we had determined that we did not meet the definition of a "facility" in relation to an electrical power system defined in §98.308. Recently it came to our attention that we do meet the definition of a "facility" and as a result meet the definition of the "electrical transmission and distribution use" source category (subpart DD). Since the "electrical transmission and distribution use" source category is a source listed on table A-3 of 40 CFR 98, subpart A, our site would automatically be subject to reporting emissions from 2011.		
	Since our electrical transmission and distribution equipment contains only "sealed" circuit breakers, containing a total of 1,740 pounds of SF6, the site would be under the 17,820 pound threshold for having to report emissions from the "electrical transmission and distribution"		

	Corrections And Other Amendments Defenence			
Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)	
	source category. While the site would not have to report emissions from this source category we would still be subject to reporting due to having a source listed on the "all-in" table (table A-3). The only source category that would be reported then would be the "General Stationary Combustion Sources" source category with emissions of approximately 9k metric tons (MT) CO ₂ e. With emissions of approximately 9k MT of CO ₂ e, we feel that we are not the "big-hitter" facility that was intended to be subject to this reporting requirement. We believe that the "electrical transmission and distribution use" source category as listed on table A-3 should include the 17,820 pound threshold just as the "municipal solid waste landfills" source category, as listed on table A-3, is only an "all-in" source if the emissions are 25k MT CO ₂ e. I have a question about how EPA interprets the phrase in 98.2(a) that states: "the annual GHG report must cover stationary fuel combustion sources (subpart C of this part), miscellaneous use of carbonates (subpart U of this part), and all applicable source categories listed in Table A3 and Table A4 of this subpart." I assume that this phrase means that I must evaluate each category to see if I qualify and, if so, must report for that category. However, the language raises the following questions: 1) does the specific mention of "carbonates" mean that I must report CO ₂ e from carbonates even if I don't qualify for subpart U? 2) the calculation methodology in 98.2(b) states I must consider fluorinated gases. If I am in a category that does not consider these gases, do I need to consider them as a result of 98.2? For example, if I am a general industrial source, but have a transformer that could leak SF6, must I include SF6 emissions even though I don't meet the		Helpline	

	Corrections And Other Amendments		
Technical Issue	Question Submitted to EPA requirements of an electrical distribution system?	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	Subpart W – Petroleum and Natural Gas		
Definition of gas well	In the published version of Subpart W, you define gas wells in 98.238 as follows: "Gas well means a well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil." This definition appears to exclude any gasproducing well that also was completed to produce any amount of crude oil. We assume, therefore, that any well that produces crude oil, no matter whether it produces gas to sales, is excluded from reporting under the following source categories in Subpart W: (5) Gas well venting during well completions without hydraulic fracturing. (6) Gas well venting during well workovers without hydraulic fracturing. (7) Gas well venting during well workovers with hydraulic fracturing. (8) Gas well venting during well workovers with hydraulic fracturing. Please confirm that our interpretation is correct. We assume that gas wells that also produce hydrocarbon condensate are INCLUDED in these categories (since condensate is not crude oil). But oil wells that produce gas are excluded.	At least 4 individuals	Helpline
	For 98.232(c), Onshore Production, source categories (5)-(8): Do these 4 source categories ONLY pertain to natural gas wells, OR to both oil and gas wells? If they only pertain to gas wells, please explain the definition of a "Gas Well." In section 98.238, the Rule defines a "Gas Well" as "a well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil."		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	This definition is unclear - does this mean the gas well has to produce dry gas only? What if it produces condensate or light oils with the gas - can this be differentiated from crude oil in the Rule's definition?		
	Sections 98.233(g) and 98.233(h) require that "gas well" venting during completions and workovers from hydraulic fraction and "gas well" venting during completions and workovers without hydraulic fraction, respectively, be estimated. Section 98.238 provides the following definition for "gas well": means a well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil. This definition appears to exclude "oil wells" from reporting under Sections 98.238(g) and (h). Can EPA confirm then, that crude oil producing wells are not required to report venting emissions associated with well completions and workovers (with or without hydraulic fracturing) and that EPA's intent was to only have wells meeting the provided definition of "gas well" report these vented emissions?		Helpline
	For 40 CFR 98 Subpart W, is there any guidance on how to classify a well as a "gas well" and as an "oil well" other than the definitions in 40 CFR 98.237? Can we use the gas-to-oil ratio (GOR) of the well to classify the well as a "gas well" or as an "oil well"? Some operators and petroleum engineers use the following criteria for oil versus gas wells: For wells with a GOR of <10,000 standard cubic feet per barrel, the well is classified as an oil well. For wells with a GOR of >10,000 standard cubic feet per barrel, the well is classified as an gas well.		Helpline
Clarifying the 25 MMscf throughput threshold for the onshore natural gas processing industry segment to state that the throughput threshold is based on an annual	As I interpret the recently finalized Subpart W, gas processing facilities that do not process more than 25 mmScf/day are not subject to reporting under Subpart W regardless of whether they are subject to reporting under Subpart C. Can you please provide more guidance on how this threshold should be calculated? Is it an average daily throughput based on the entire reporting year?	At least 5 individuals	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
average throughput.			
	Section 98.230(a)(3)(ii) states that "All processing facilities that do not fractionate with throughput of 25 MMscfd per day or greater." are included in the source category. Please specify the basis for the 25 MMscf per day throughput - is this based on annual average daily flow or max design capacity?		Helpline
	25 mmscf/day is design capacity for a processing plant or the actual in the following definition in 98.230(a)(3):		Helpline
	Onshore natural gas processing. Natural gas processing separates and recovers natural gas liquids (NGLs) and/ or other non-methane gases and liquids from a stream of produced natural gas using equipment performing one or more of the following processes: oil and condensate removal, water removal, separation of natural gas liquids, sulfur and carbon dioxide removal, fractionation of NGLs, or other processes, and also the capture of CO ₂ separated from natural gas streams. This segment also includes all residue gas compression equipment owned or operated by the natural gas processing facility, whether inside or outside the processing facility fence. This source category does not include reporting of emissions from gathering lines and boosting stations. This source category includes: (i) All processing facilities that fractionate. (ii) All processing facilities that do not fractionate with throughput of 25 MMscf per day or greater		
	Per this definition, we understand that if a booster processes 25 or more mmscf/day gas and generates condensate or produced water, it is considered Natural gas processing per this quoted definition. Please verify.		

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	98.230(3) – Onshore natural gas processing. The regulation specifies that all processing facilities that do not fractionate but have a throughput of 25MMSCF/day or greater is required to report. Our clients expect that this would be based on actual annual average since this is an annual report of actual emissions. Please confirm.		Helpline
Clarifying the throughput threshold for glycol dehydrators to state that the throughput threshold is based on an annual average throughput.	98.233(e) – Dehydrator vents. The regulation requires producers and processors to identify which dehydrators have a throughput less than 0.4 MMscf/day. Our clients expect that this would be based on actual annual average since this is an annual report of actual emissions. Please confirm.	At least 2 individuals	Helpline
	How should the daily throughput be determined for dehydrators in 98.233(e) to compare to the threshold of 0.4 MMscf/day? Is it based on design capacity, maximum daily throughput, or annual average actual daily throughput? Is the throughput re-evaluated annually?		
Reporting requirements for blowdown vent stacks	Section 98.233(i)(3) states that one should "calculate the total annual venting emissions for each equipment type using Equation W-14 of this section." The parameter Vv is defined as the total volume of blowdown equipment chambers (including pipelines, compressors and vessels) between isolation valves in cubic feet, therefore the equation calculates the emissions for all the equipment between isolation valves which could include different types of equipment. However, the reporting section 98.236(c)(7)(i) states that emissions should be reported by individual equipment type. How should a facility report the emissions if there is more than one type of equipment between isolation valves for Equation W-14?	At least 1 individual	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)	
Clarifying the throughput threshold for onshore production storage tanks to state that the throughput threshold is based on an annual average throughput.	98.233(j) – Onshore production storage tanks. The regulation stipulates that calculation methodologies for onshore production storage tanks depends on whether the separator has a throughput greater than or equal to 10 barrels per day. Our clients expect that this would be based on actual annual average since this is an annual report of actual emissions. Please confirm.	At least 3 individuals	Helpline	
	The various methodologies for onshore production storage tanks in 98.233(j) are based on whether the daily oil throughput is greater than or less than 10 barrels/day. How should the daily oil throughput be calculated? Is it the annual throughput divided by the number of days that the well produced during the year? Or the annual throughput divided by the number of days in the calendar year (i.e, 365 or 366)? Or some other method?		Helpline	Helpline
	How should the daily oil throughput be determined for onshore production storage tanks in 98.233(j) to compare to the threshold of 10 barrels/day? Is it based on design capacity, maximum daily throughput, or annual average actual daily throughput? Is the throughput reevaluated annually?			
Clarify that N ₂ O , CH ₄ , and CO ₂ must be reported under the natural gas processing industry segment in 98.232(d) .	I wanted to confirm that for flares at onshore natural gas production facilities, CO ₂ , CH ₄ and N ₂ O should be reported; while at onshore natural gas processing facilities, only CO ₂ and CH ₄ should be reported. Is this correct?	At least 1 individual	Helpline	

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Clarify the definition of GHG _i in Equation W-1	For pneumatic devices, how and at what frequency should GHGi in Equation W-1 be determined for onshore petroleum and natural gas production facilities? Note that the equation does not refer to 98.233(u), so it is not clear how GHGi should be determined and at what frequency. For pneumatic devices at facilities specified in 98.230(a)(3) through (a)(8), Equation W-1 says GHGi equals 1, but it is not clear which species you are referring to. Do you mean GHGi equals 1 mole fraction of CH ₄ ? Do you mean GHG equals 1 mole fraction of CO ₂ ? Am I supposed to assume it equals 1 mole fraction of CH ₄ and CO ₂ ? Please clarify exactly which GHG species you are referring to in Equation W-1. Equation W-1, legend entry for GHGi includes reference to facilities listed in 98.230(a)(3) through (a)(8). However, reporting for this source (pneumatic device venting) is required only for onshore production (which is specifically mentioned earlier in this legend item), and NG transmission compression and underground NG storage, which are 98.230(a)(4) and (a)(5) respectively. I recommend changing this reference in the legend to reference only (a)(4) and (a)(5), to avoid confusion. Regarding Equation W-1: In legend, GHGi = For onshore petroleum and natural gas production facilities, concentration of GHG ₁ , CH ₄ or CO ₂ , in produced natural gas; for facilities listed in §98.230(a)(3) through(a)(8), GHG ₁ equals 1. Why include 98.230(a)(3) through (a)(8), given that, of these segments, reporting of emissions from pneumatic device venting is required only for NG transmission compression [98.230(a)(4)] and underground NG storage [98.230(a)(5)], in addition to onshore production facilities which are specified in first phrase.	At least 5 individuals	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	For pneumatic devices, how and at what frequency should GHG _i in Equation W-1 be determined? Similarly for Equation W-31. Note, these equations do not refer to 98.233(u).		Helpline
	In 98.233(a), Eq W-1 has the parameter: "GHG $_i$ = For onshore petroleum and natural gas production facilities, concentration of GHG i, CH $_4$ or CO $_2$, in produced natural gas; for facilities listed in §98.230(a)(3) through (a)(8), GHG $_i$ equals 1." However, for facilities listed in 98.230(a)(3) through (a)(8), it is not realistic or reasonable for GHG $_i$ to equal 1 for both CH $_4$ and CO $_2$. Did EPA intend to provide a GHG $_i$ for both CH $_4$ and CO $_2$? For example, in 98.233(q), Eq W-30 has: "GHG $_i$ = For onshore natural gas processing facilities, concentration of GHG $_i$, CH $_4$ or CO $_2$, in the total hydrocarbon of the feed natural gas; for other facilities listed in 98.230(a)(4) through (a)(8), GHG $_i$ equals 1 for CH $_4$ and 1.1 × 10-2 for CO $_2$." OR, did EPA intend that only CH $_4$ emissions should be calculated for natural gas pneumatic device venting for facilities listed in 98.230(a)(3) through (a)(8)?		Helpline
Clarify the definition of GHG _i in Equation W-2 to include a reference to paragraph 98.233(u)(2)(i)	For natural gas driven pneumatic pumps, how and at what frequency should GHGi in Equation W-2 be determined for onshore petroleum and natural gas production facilities? Note that the equation does not refer to 98.233(u), so it is not clear how GHGi should be determined and at what frequency.	At least 1 individual	Helpline
Amend 98.233(d) to clarify calculation methods for acid gas removal vents.	Assume that a facility which receives and fractionates a natural gas liquids stream is subject to Subpart W, and the facility has an acid gas removal unit but cannot comply with Methodology #1 or #2 for acid gas removal units. This facility does not have a continuous gas analyzer on the gas stream out of the AGR unit and does not take quarterly samples of the gas stream out of the AGR unit. Therefore, the facility would prefer to use 98.233(d)(8)(iii) to determine the volume fraction of CO ₂ content in the gas stream out of the AGR unit. However, what would be the sales line quality specification for CO ₂ in "natural gas" for this facility, as the facility does not process or sell a	At least 1 individual	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	natural gas stream? Would this be the CO ₂ specification for the outlet gas stream for the AGR unit?		
Clarification of 98.233(e) for the calculation of emissions from dehydrator vents.	Subpart W 98.233(e)(1)(xi)(A) (related to dehydrator wet natural gas sampling) reads, "Use the wet natural gas composition as defined in paragraph (u)(2)(i) of this section." Is it correct that this is meant to only reference (u)(2)(i) which is only applicable to Onshore Petroleum and natural Gas Production Facilities? Or, is it supposed to reference all of (u)(2), which would include other source categories as well?	At least 1 individual	Helpline
Amend 98.233(e)(1) to clarify that 0.4 mscf/day throughput threshold is determined using annual	For emissions under §98.233(e)(1), emissions must be calculated from dehydrator vents with throughput greater than or equal to 0.4 million standard cubic feet per day. Is this throughput specific to vent throughput or dehydrator throughput?	At least 2 individuals	Helpline
average daily throughput.	The selection of the two methodologies for dehydrator vents in 98.233(e) is based on whether the daily throughput is greater than or less than 0.4 MMscf/day. How should the daily throughput be calculated? Is it the annual throughput divided by the number of days that the dehydrator operated? Or the annual throughput divided by the number of days in the calendar year (i.e, 365 or 366)? Or some other method?		Helpline
Amend 98.233(f) and Equation W-8 to state that calculation methodology 2 is to be used to calculate the total emissions for well	There appear to be several issues with equations W-8 and W-9. The equations include a pressure correction, but not a temperature correction The emission term that results from the equations is labeled as actual cubic feet, but the conversions really result in standard cubic feet due to the pressure correction The equations then reference equation W-33 which	At least 1 individual	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
venting for liquids	converts from actual to standard conditions, essentially double correcting for		
unloading.	pressure. The units in the second part of the equations are not clear. If HR is		
	an annual value (sales flow rate/hr per year), than subtracting 1 hour or 30		
Amend Equation W-9	minutes from annual hours is meaningless. If HR is on an event basis or daily		
	basis, then the equations are missing a summation.		
Amend Equation W-13 to	Equation W-10 is mentioned under Completions and Workovers with	At least 1	Helpline
correct parameter	hydraulic fracturing, but the equation itself only mentions completions.	individual	
definitions.	Equation W-13, under completions and workovers without fracturing, some equation terms reference walkovers and others reference completions. Please		
	clarify the terms associated with these equations in their use for both		
	workovers and completions.		
	The emission factor applied in Equation W-13 is already on a CH ₄ basis, but	At least 1	Helpline
	the rule treats the output from Equation W-13 as if it is on a total gas basis.	individual	Погрине
	Equation W-13 is also expressed at actual conditions, but the emission factor		
	applied is based on standard conditions of 60 °F and 14.7 psia.		
Clarify that the parameter	The calculation methodology for blowdown vent stacks indicates that natural	At least 2	Helpline
"Vv" in Equation W-14	gas volumetric emissions at standard conditions (calculated using Eq. W-14)	individuals	
is the actual physical	are to be converted to GHG mass emissions using the methodology in		
volume of the blowdown	98.233(v). Unless the blowdown stream was a pure CH ₄ or CO ₂ stream,		
equipment.	natural gas volumetric emissions cannot be converted directly to GHG mass		
	emissions. Before volumetric natural gas emissions can be converted to GHG		
	mass emissions, the volumetric natural gas emissions must first be converted		
	to GHG volumetric emissions. Please confirm that emissions for		
	blowdown vent stacks should be calculated using the following approach: volumetric natural gas emissions at standard conditions [98.233(i), Eq. W-14],		
	convert to GHG volumetric emissions (CH_4 and CO_2) at standard conditions		
	[98.233(u), Eq. W-35], convert to GHG mass emissions at		
	standard conditions [98.233(v), Eq. W-36].		
	The preamble to Subpart W discusses that total physical volumes of 50 cubic		
	feet or less are exempt from reporting. However, the regulation states that		

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	total volume of 50 standard cubic feet or less are exempt from reporting.		
Amendments to parameter "E _n " and removal of parameter "E _t " of Equation W-16	I am not understanding Equation W-16 (98.233(j)(8)) that is to be used when a dump valve on a separator fails to close. The confusion involves En and Et. The first part of the equation is to calculate emissions when the dump valve is stuck open and includes a correction factor (5.37 for gas condensate production) that is multiplied by En and the hours the valve was stuck open. En is supposed to tank emissions during Tn, which is when the valve is stuck open. Methodologies 1,2, or 5 does not give you the emissions when the valve is stuck open - it gives an emission estimate off the oil tank under normal operations. What is the correction factor for if En is supposed to be the emission rate during the malfunctioning valve? It would make more sense to me if En and Et were the same - whatever is calculated in Methodologies 1 - 5 converted to a scf per hour. Then the correction factor would be used to increase the emissions (by 5.37 times) during the hours that the valve was malfunctioning. Unless En and Et are the same, I don't see how the EPA's equation will work. ow do you determine En? How is it different from Et?	At least 1 individual	Helpline
Clarify 98.233(k)(4)(ii) to state that the flare stack calculations are to be used for emissions that are sent to a flare and not from a flare.	How do you determine Et? Under §98.232(e), emissions from flares are not a required source for calculation and reporting. Under section §98.233(o)(9), however, emissions from flares associated with centrifugal compressors must be reported. There are multiple cases throughout Subpart W where these confusions exist (i.e. section §98.233(k)(4), which is specific to the transmission compression industry segment). Please clarify which section of the rule is the correct guiding action.	At least 1 individual	Helpline
Clarifying the density parameter in Equation W-36	Section 98.233(v) GHG mass emissions Eq. W 36 in Subpart W, uses a density of 0.0538 kg/ft ³ for CO ₂ and 0.0196 kg/ft ³ for CH ₄ at 68°F. It uses 0.0530 kg/ft ³ for CO ₂ and 0.0193 kg/ft ³ for CH ₄ at 60°F. Are these values correct, I would expect the gas to be denser at a lower temperature?	At least 1 individual	Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Amend 98.233(z) for	98.233(z) directs onshore petroleum and natural gas production and natural	At least 3	Helpline
determining combustion	gas distribution to calculate CO ₂ , CH ₄ , and N ₂ O emissions from combustion	individuals	
emissions from both the	sources. Calculation approaches are clearly defined for CO_2 and N_2O , but are		
onshore petroleum and	not clearly defined for CH ₄ . 98.233(z)(1) indicates that if the fuel combusted		
natural gas production	is listed in Table C-1 (or is a blend of fuels in Table C-1) then the Tier 1		
and natural gas distribution industry	calculation methodology in Subpart C must be used. Please confirm that the		
segments.	use of the Tier 1 approach applies to the calculation of both CO ₂ and CH ₄ emissions. Please also indicate how CH ₄ emissions are to be calculated for		
segments.	sources that combust field or process vent gas.		
	98.233(z) says to use Eq. W-39 to calculate "GHG emissions". But doesn't	-	Helpline
	that equation yield only CO ₂ emissions? How are CH ₄ emissions to be		Петрине
	calculated? Also, the explanation of the HHV parameter in Eq. W-40 (for		
	calculating N_2O emissions) refers to "paragraphs (z)(8)(i), (z)(8)(ii),		
	or(z)(8)(iii)". I believe the references should be to $(z)(6)$ instead of		
	(z)(8) as there is no $(z)(8)$.		
	Reporters are required to estimate CO ₂ , CH ₄ , and N ₂ O emissions from		Helpline
	combustion sources under paragraph (z) of Subpart W. If a reporter combusts		_
	a common fuel, emissions of CO ₂ and CH ₄ are estimated using Tier 1 in		
	Subpart C while N ₂ O emissions are estimated using equation W-40. If a		
	reporter combusts a solid or liquid fuel not listed in Table C-1, emissions		
	should be estimated using Tier 2 of Subpart C. Reporters that combust field		
	gas or process vent gas (neither listed in Table C-1) estimate emissions of		
	CO ₂ using equation W-39 and emission of N ₂ O using equation W-40. How		
	should CH ₄ emissions be estimated? Equation W-39 assumes all CH ₄ is		
	converted to CO ₂ during combustion.		** 1 11
Revised Equation W-40	Equation W-40: In the equation, the conversion factor from kg to metric tons	At least 3	Helpline
to account for an	is given as 1×10^3 ; the conversion factor should be 1×10^{-3} , as given in the	individuals	
incorrect exponent.	legend.	-	II al alia a
	Equation W-40 has a factor (1×10^3) that should be 1×10^{-3}).	-	Helpline
	Regarding Equation W-40:		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	Equation is given as: $N_2O = (1 \times 10^3) \times \text{Fuel x HHV x EF (Eq. W-40)}$ Legend includes:		
	$EF = Use \ 1.0 \times 10^{-4} \ kg \ N_2O/mmBtu.$		
	1×10^{-3} = Conversion factor from kilograms to metric tons.		
	HHV = High heat value of the fuel from paragraphs $(z)(8)(i)$, $(z)(8)(ii)$ or $(z)(8)(iii)$ of this section (units must be consistent with Fuel).		
	Q: Shouldn't the factor in the equation include the -3 exponent instead of +3, for correct conversion from kg to metric tons?		
	Q: Paragraphs referenced by HHV legend do not exist; reference should probably be to (z)(6) rather than (z)(8).		
Insert missing variables in Equation W-41.	Equation W-41: The legend is missing the terms "a" and "b".	At least 2 individuals	Helpline
•	Regarding Equation W-41: Legend is missing terms "a" and "b".		Helpline
Revise emission factors for high bleed, low bleed, and intermittent bleed pneumatic devices on a total hydrocarbon basis.	The derivation provided in the TSD for the high bleed, low bleed, and intermittent bleed pneumatic device emission factors provided in Table W-1a introduces an error. The derivation incorrectly divides by the CH ₄ weight fraction (e.g. D=0.788).	At least 1 individual	Helpline
	Subpart FF – Underground Coal Mines		

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Amending Table A-3 to revise applicability to mines liberating 36,500,000 acf of CH ₄ or more per year from their ventilation systems	My question concerns interpretation of the applicability of reporting for underground coal mines under Subpart FF. The July 12, 2010 rule states active mines that are monitored quarterly by MSHA must report, whereas all other facilities have a 25,000 metric ton threshold. The May 26, 2010 (revised June 29, 2010) Technical Support Document for Underground Coal Mining states that only 19% of mines will need to report with emissions estimated to be about 15,000 metric tons CO ₂ e or more. Are all active mines that have MSHA quarterly monitoring (or more frequent) required to report or only those with emissions of 15,000 metric tons or more?	At least 2 individuals	Helpline
	In 40 CFR part 98, subpart FF the term(s)"MSHA threshold" appears but it is not elsewhere defined. Could you please cite a reference or provide me with a definition of that term.		Helpline
Placement and timing of sampling for moisture content	If we are taking dry samples, how are we supposed to get moisture content readings from dry samples? Is there a sampling method or certain type of equipment that we use to get these readings/values? The rule states that moisture content readings should be taken quarterly for vent systems and weekly for degas systems.	At least 2 individuals	Helpline
	What apparatuses have been approved to record methane, moisture content, air flow, barometric pressure, and temperature to satisfy 40 CFR Part 98?		Helpline
Clarification of how to measure for moisture content and amendment	One of the requirements for the testing of both ventilation air and degas system samples is moisture content in %. Is this the atmospheric moisture content or the moisture content of the gas sample?	At least 3 individuals	Helpline
of Equations FF-1 and FF-3	If we are taking dry samples, how are we supposed to get moisture content readings from dry samples? Is there a sampling method or certain type of equipment that we use to get these readings/values? The rule states that moisture content readings should be taken quarterly for vent systems and weekly for degas systems.		Helpline
	Can you please share the appropriate methodology and equipment for collecting quarterly grab samples for methane, flow, temperature, and		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	pressure in ventilation shafts of underground mines?		
Use of MSHA data to calculate emissions	Two mines have monitored for methane to satisfy quarterly MSHA requirements. MSHA lab analyses of bag samples have consistently shown zero methane concentration (0.000 %) in the mine ventilation air. I believe air flow rates at the ventilation air intake and exhaust points are currently estimated from fan performance curves. My question: do these mines need to invest in more precise air flow measurement technology as long as they continue to show zero methane, or can they simply use the data from their MSHA reports to complete the GHG emissions report?	At least 3 individuals	Helpline
	Can you please share the appropriate methodology and equipment for collecting quarterly grab samples for methane, flow, temperature, and pressure in ventilation shafts of underground mines? I have looked at the reference section of the regulations but it is not clear to me which methods are the appropriate methods to use. It is my understanding that MSHA does not monitor pressure and their instrumentation does not correct for pressure.		Helpline
	Under Subpart FF, underground coal mines must report emissions from ventilation systems. Section 98.324(b)(2) indicates that the data could be obtained from "the quarterly (or more frequent) testing performed by MSHA." The concern is that MSHA has never reported temperature and pressure data in the past, and these are required to calculate emissions in equation FF-1. Have arrangements been made for MSHA to collect this REQUIRED data? If not, what default values can the mines use? Or, if not, will the mines be required to supplement the MSHA reported data by taking their own temperature and pressure readings in each quarter and at all of the same locations where MSHA samples?		Helpline
Clarification of monitoring equipment	What apparatuses have been approved to record methane, moisture content, air flow, barometric pressure, and temperature to satisfy 40 CFR Part 98?	At least 2 individuals	Helpline
required	Can you please share the appropriate methodology and equipment for collecting quarterly grab samples for methane, flow, temperature, and pressure in ventilation shafts of underground mines? I have looked at the		Helpline

Technical Issue	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	reference section of the regulations but it is not clear to me which methods are the appropriate methods to use. It is my understanding that MSHA does not monitor pressure and their instrumentation does not correct for pressure.		
	Subpart II- Industrial Wastewater Treatment		
Replace the term "landfill gas" with "biogas" in 98.352(d)	In the final rule published on July 12, 2010, in paragraph 98.352(d) of Subpart II, Industrial Wastewater Treatment, reference is made to landfill gas destruction device. I believe this is an error since it has no relation to the Subpart.	At least 1 individual	Helpline
Error in Equation II-6	We have identified an error in Equation II-6 of Subpart II (industrial wastewater treatment) for calculating methane emissions from a wastewater treatment operation where some of the generated methane is captured and destroyed.	At least 2 individuals	Helpline
	The equation will return erroneously high results for methane emissions in many scenarios. The correct form of the equation is: CH ₄ En = CH ₄ Ln + Rn (1- [(DE1 * fDest_1)+ (DE2 * fDest_2)])		
	Eq. II-6 in Subpart II for industrial wastewater treatment appears to have an error. Since Rn is the total methane recovered and that value is the multiplier for each destruction device, it ends up double counting emissions since the primary and back-up device emissions are added. Essentially the total methane Rn is first multiplied by the efficiency of the first device and then you take the entire methane value again and multiply it by the back-up device efficiency and then add the two values. The equation results in more methane being emitted than is recovered.		
	Subpart TT – Industrial Waste Landfills		

Summary Of Questions And Issues From The EPA Helpline And Trade Associations Being Resolved By The Proposed Technical **Corrections And Other Amendments** Reference Type and (Helpline or Trade approximate number of Association **Question Submitted to EPA Technical Issue** submittals materials) Determining The preamble for Industrial waste landfills indicates EPA's desire to not require At least 1 Helpline reporting for landfills that only received inert or inorganic waste. 98.460(c)(2) waste-specific individual includes a list of specific wastes that are considered inert, along with other DOC values for criteria in 98.460(c)(2)(xii) – volatile solids concentration of less than 0.5%. It closed landfills seems that per 98.464 that in order to claim the waste is less than 0.5% volatile solids that sampling and testing are required. Our company has some landfills that only accepted inert wastes, such as waste from magnesium metal production, and magnesium hydrate. The facilities have since shutdown and the landfills are closed, so obtaining a sample cannot be done. These wastes contain no carbon. Is it possible to use process knowledge to determine that a material is inert or has a volatile solids content of less than 0.5%? Solid waste regulations allow for the use of process knowledge during waste characterization. If not, this will require extensive effort to over report emissions that we know do not exist. Since the material cannot be sampled, the values in Table TT-1 for "other industrial waste" would need to be used, resulting in a waste that does not contain carbon reporting the same emissions as waste from the pulp and paper industry. The second error is in regard to the method presented for calculating a waste-**Delete Equation** At least 1 Helpline specific DOCx value for waste streams using Equation TT-8 in Section individual TT-7 and amend 98.364(b)(4). The key to Equation 8 states that the result of the calculation Equation TT-8 for (DOCx) is "degradable organic content of waste stream in Year X (weight determining fraction, wet basis)." However, the equation as provided would return a DOCx volatile solids and value on a dry basis. DOC values In 40 CFR Based on the preamble text and the wording of § 98.463(a)(2), it would appear At least 11 Helpline that EPA requires calculation and reporting of GHG only from waste 98.463(a)(2), individuals placed in landfills on or after January 1, 1980. However, definitions for terms in revise "January 1, 1980" to be Equations TT-2 and TT-4 refer to calendar year 1960, not 1980, as

the earliest start date for landfill operation. Is the date 1960 that appears at Equations TT-1 and TT-4 a typographical error that should be 1980?

"January 1, 1960"

		Corrections And Other Amendments		D 6
Technical Issue	e	Question Submitted to EPA	Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
	depos for St	ext of Subpart TT indicates that the waste quantities to be used in the lation of annual (methane) greenhouse gas are those that have been sited in the landfill beginning on January 1, 1980. While the definition art Year of equations TT-1 and TT-4 indicates that the owner or operator is a 1960 as the start year. Which is correct??		Helpline
	1 spectified the land	acilities required to calculate emissions beginning in 1960 or 1980? Eq. TT-cifies that emission calculations are to begin in 1960 (or the opening year of ndfill if later), but 40 CFR 98.463(a)(2) specifies that annual waste ities are to be determined beginning in 1980 (or the year the landfill first ted waste).		Helpline
Clarify that only descriptions of waste streams disposed of in the landfill and used in Equation TT-1 must be reported	Subpa	is the reporting threshold for GHG emissions for Industrial Landfills under art TT (since they do not fall under HH)"? What if they accept 60% ash at ndfills? Do we calculate only 40% of the emissions and report that er?	At least 1 individual	Helpline
Definition of "construction and demolition waste landfill"	and deconstrated amende "dedicated "C&I C&D	r Subpart TT Industrial Waste Landfills, would a construction emolition (C&D) landfill that accepts site clearance waste in addition to ruction waste be exempt under 98.460(c)(1)? In the recent Oct 28, 2010 dment to subpart HH for Municipal Solid Waste Landfills, references to cated C&D landfills" were removed and a new definition was added for D waste landfill" that clearly references site clearance waste as a typical waste. Did EPA intend for site clearance waste to be a typical waste yed by dedicated C&D landfills under subpart TT?	At least 1 individual	Helpline

	Corrections And Other Amendments		
Technical Issue		Type and approximate number of submittals	Reference (Helpline or Trade Association materials)
Definition of "design capacity" in 98.468	What is the definition of "design capacity"? If the design capacity is greater than $300,000$ metric tons (MT), but the total facility is below $25,000$ MT of CO_2e per year (taking into account the inert material in the landfill), do they report?	At least 2 individuals	Helpline
	How is design capacity calculated when dealing with landfills that are not engineered landfills with a defined capacity? Is there some way to eliminate small landfills without going through an involved calculation process? The rule does not address this issue.		Helpline
Amend Table TT- 1 - revise the description of "Inert Waste"	In Table TT-1 of Subpart TT (Default DOC and Decay Rate Values for Industrial Waste Landfills), it refers to inert waste listed in section 98.460(b)(3). However, there is no (3) under 98.460(b). Should it read 98.460(c)(2)?	At least 2 individuals	Helpline
	In Table TT-1 it lists "Inert Waste [i.e., wastes listed in §98.460(b)(3)]." However, that reference is not in the rule, it only goes to §98.460(b)(2) then progresses to §98.460(c) which I suspect is the intended list but that is not what the table says. Then, when reviewing the list, the numbering goes from v to vii with no vi. I would think the correct reference would be to §98.460(c) - both (1) and (2).		Helpline